

I claim:

1. A method of preparing an integrated circuit comprising the steps of:

5 providing a silicon wafer having a front side and a back side;

building the integrated circuit on the front side of the silicon wafer;

thereafter removing substrate from the back side of the silicon wafer;

10 thereafter spraying the back side of the silicon wafer with a base while spinning the wafer; and

rinsing the silicon wafer.

2. The method of claim 1 further comprising the step of cutting the wafer into die.

15 3. The method of claim 2 further comprising the step of electrically connecting the die such that each operates as an individual integrated circuit chip.

4. The method of claim 3 further comprising the step of 20 encapsulating the die and preparing each for use as an integrated circuit chip.

5. A method of preparing an integrated circuit comprising the steps of:

providing a silicon wafer having a front side and a back side;

building the integrated circuit on the front side of the silicon wafer;

removing substrate from the back side of the silicon wafer;

spraying the back side of the silicon wafer with an aqueous
5 solution of potassium hydroxide while spinning the wafer;
and

rinsing the silicon wafer.

6. The method of claim 5 further comprising the step of cutting the wafer into die.

7. The method of claim 6 further comprising the step of electrically connecting the die such that each operates as an individual integrated circuit chip.

8. The method of claim 7 further comprising the step of encapsulating the die and preparing each for use as an integrated chip.

9. The method of claim 5 wherein the aqueous solution of potassium hydroxide comprises a solution of about 20% potassium hydroxide.

10. The method of claim 6 wherein the aqueous solution of
20 potassium hydroxide comprises a solution of about 20% potassium hydroxide.

11. The method of claim 7 wherein the aqueous solution of potassium hydroxide comprises a solution of about 20% potassium hydroxide.

12. The method of claim 8 wherein the aqueous solution of potassium hydroxide comprises a solution of about 20% potassium hydroxide.

13. A method of manufacturing an integrated circuit chip,
5 wherein the integrated circuit chip is manufactured by building up a plurality of integrated circuits on the front side of a silicon wafer substrate and backgrinding the back side of the silicon wafer substrate, and said backgrinding is accomplished by securing the built up front side of the silicon wafer to a
10 work chuck and grinding a portion of the silicon wafer substrate from the back side of the silicon wafer substrate, and thereafter etching the backside of the silicon wafer substrate with an alkali etching solution and cutting the silicon wafer into a plurality of individual integrated circuit chips.

15 14. The method of claim 13 further comprising the step of spinning the silicon wafer substrate while etching the backside.

15. The method of claim 13 wherein the silicon wafer is maintained on the work chuck during grinding and etching steps.

20 16. The method of claim 13 wherein the alkali etching solution comprises an aqueous solution of potassium hydroxide.

17. The method of claim 13 wherein the alkali etching solution comprises an aqueous solution of sodium hydroxide.